

CLAIMS

We claim:

1. An data structure stored in a data store, comprising:  
5 a plurality of data values comprising an item specification provided in a plurality of data fields describing an item, said data fields including:  
at least one attribute value;  
at least one component value; and  
10 at least one allocation value.
2. The data structure of claim 1 wherein the attribute comprises one of a group consisting of the following: a physical attribute of the item; and a functional attribute of the item.  
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3. The data structure of claim 1 wherein the specification further includes a virtual area association.
4. The data structure of claim 1 further including an item type  
20 data structure, including attribute definitions and component definitions.
5. The data structure of claim 1 further including at least one history tracking field identifying changes to data in said other fields.
- 25 6. The data structure of claim 5 wherein said history tracking field is updated based on a publication process.
7. The data structure of claim 1 further including an item type defining said data fields for at least one item specification.

8. The data structure of claim 1 further including a schedule definition comprising at least one specification.

5 9. A method for constructing data concerning item specifications of an asset, comprising:

providing a user data entry interface;

receiving a plurality of data values, each into a data field of the interface, wherein the plurality of data fields comprise a specification for the item and each data field of the specification describes an attribute of the item, and

10 storing the specification into a database on a computer system.

10. The method of claim 9 wherein the attribute being one of a group consisting of the following: a physical attribute of the item; and a functional attribute of the item.

11. The method of claim 9 wherein the method further includes:

storing an item object in the database;

20 creating a relationship between the item object and the specification;

storing the relationship in the database.

25 12. The method of claim 9 wherein said step of providing occurs on a first computer and said step of storing occurs on a second computer.

13. The method of claim 12 wherein said step or providing includes providing said user data entry interface to a first computer and

said step of receiving occurs on a second computer, and said first and second computers are coupled by a network.

5           14.    The method of claim 13 wherein said network is the Internet.

          15.    The method of claim 1 wherein said step of providing comprises providing a template creation tool.

10           16.    The method of claim 15 wherein said step of providing comprises providing a specification creation tool.

          17.    The method of claim 15 wherein said step of providing comprises providing a specification management tool

15           18.    The method of claim 1 further including the steps of:  
                  defining a specification template; and  
                  said step of receiving comprises: receiving said data values into one or more templates to create one or more specifications.

20           19.    The method of claim 18 wherein said step of defining said template comprises:  
                  receiving general properties information; and  
                  receiving attribute information.

25           20.    The method of claim 19 wherein said step of defining further includes receiving component information.

21. The method of claim 18 wherein said step of defining further includes receiving preferences information.

5 22. The method of claim 9 wherein said receiving step includes defining a configurable data object by performing at least one of a group consisting of the following:

10 defining the configurable data object;  
adding an attribute to the configurable data object;  
modifying an attribute of the configurable data object; and  
removing an attribute from the configurable data object.

23. The method of claim 9 wherein the method includes the sub-step of configuring a configurable data object.

15 24. The method of claim 9 wherein the configurable data object comprises a specification for the item.

20 25. The method of claim 9 wherein the steps of providing and receiving are performed on a computer coupled to a network.

26. The method of claim 25 wherein the network is the Internet.

25 27. The method of claim 25 wherein the step of receiving is performed by receiving data from an item management application provided as part of the data entry interface.

28. A method of allowing users to manage an asset, comprising:

(a) providing an application server coupled to a network;

(b) providing, responsive to a client request, an item specification management toolset including at least one template definition application; and

(c) receiving data from the client and storing it in a database.

29. The method of claim 28 wherein said step (b) comprises providing an item specification publisher.

30. The method of claim 28 wherein said step (b) comprises providing an item specification schedule builder.

31. The method of claim 28 wherein said step (b) comprises providing an attribute manager.

32. The method of claim 28 wherein said step (b) comprises providing a component manager.

33. The method of claim 28 wherein said step (b) comprises providing an item specification creation wizard.

34. The method of claim 28 wherein said step (c) comprises: receiving data from the item specification management toolset including one of at least attribute data or component data.

35. A system for defining and managing an asset, comprising:  
a data store for item specification data provided on a host  
computer coupled to a network; and  
a data input toolset comprising at least an item type manager and  
an item specification manager.

36. The system of claim 35 further including an item  
specification publisher.

37. The system of claim 35 further including an item  
specification schedule builder.

38. The system of claim 35 wherein the item type manager  
includes an attribute manager.

39. The system of claim 35 wherein the item type manage  
includes a component manager.

40. The system of claim 35 wherein the item specification  
manager includes an item specification creation wizard.

41. The system of claim 35 wherein the data store and the  
data input toolset are provided on the host computer.

42. The system of claim 35 wherein the data store is provided  
on the host computer and the data input toolset is provided to a second,  
client computer.

43. The system of claim 35 wherein the toolset is provided by an applications server computer.

5 44. The system of claim 42 wherein the host computer is coupled to the Internet and the data input toolset is provided to a client computer via the Internet.

10 45. The system of claim 42 wherein the host computer is coupled to the Internet and the data store is accessible by a plurality of clients via the Internet.

46. The system of claim 35 further including a specification reference tracking facility.

15 47. The system of claim 35 further including a linking facility allowing project participants to link project areas to item specification data.

20 48. The system of claim 35 further including a permissions facility regulating the actions of project participants with respect to item specification data in the data store.

25 49. The system of claim 35 further including an approval routing tool based on a publication of at least one item specification.

50. The system of claim 35 further including a notification tool linked to specific actions affecting data in the data store and providing notifications to project participants when specific actions occur as defined by a user set business rules.

51. The system of claim 35 further including a history tracking system tracking changes to data in the data store.

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